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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,789	04/21/2004	Robert Mariani	02104CIP (3600-419-01)	5079
7590 06/18/2007 Martha Ann Finnegan, Esq. Cabot Corporation 157 Concord Road Billerica, MA 01821-7001			EXAMINER MAI, NGOCLAN THI	
			ART UNIT 1742	PAPER NUMBER
			MAIL DATE 06/18/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/828,789

**Applicant(s)**

MARIANI, ROBERT

**Examiner**

Ngoclan T. Mai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27, 49, 50, 52, 53, 56, 57, 66, 75, 85 and 88-99 is/are pending in the application.
- 4a) Of the above claim(s) 57, 66, 75, 85 and 88-90 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-13, 16-18, 23-26, 49, 50, 52, 56, 92, 93, 95 and 96 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 14, 15, 19-22, 53, 91 ad 94 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### **Status of the claims**

1. Claims 1-27, 49-50, 52-53, 56-57, 66, 75, 85, 88-96 are remained wherein claims 57, 66, 75, 85, 88-90 are drawn to non-elected species and are withdrawn from consideration and claims 91-96 are added.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-3, 6, 9, 11-13, 16-18, 25, 52 under 35 U.S.C. 102(b) as being anticipated by Hall; claims 1, 2, 5, 6, 9-16, 18, 25 and 52 under 35 U.S.C. 102(b) as being anticipated by Dietz and claims 1, 2, 9, and 12 under 35 U.S.C. 102(b) as being anticipated by JP 30314747 or JP 3-197640 have been considered but are moot in view of the new ground(s) of rejection.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

4. Claims 1-2, 5-13, 16-18, 23-26, 49, 50, 52, 56, 92-93 and 95-96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oda et al. (U.S. Patent No. 7,204,866) in view of Asbury (U.S. Patent No. 6,174,493).

Oda et al discloses a method for making sintered valve metal powder comprising adding pore forming agent to niobium or tantalum powder and heat treating to remove the pore forming material and forming aggregates, col. 2, lines 39-46. Examiner notes that the aggregate reads on the claimed porous bonded valve metal. Oda teaches that the pore forming material has a thermal decomposition property, thermal sublimation properties or an acid solubility, col. 4, lines 6-8.

Oda differs from the claim in that Oda does not teach iodine as pore forming metal.

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Asbury teaches a method for forming porous article wherein iodine served as pore forming material is readily removed from the compact by heating under vacuum to sublime the iodine and trapping the iodine vapors in a cold trap. Asbury teaches the sublimation of iodine under the influence of vacuum assures that the compact remains free of impurity such as carbon, oxides, nitride, etc., col. 2, lines 44-47. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ iodine as pore forming material and method step associated therewith taught by Asbury in the method of making sintered valve metal taught by Oda since employing iodine would not only produce compact with the intended porosity but also a compact that is free from impurity as taught by Asbury.

While Oda in view of Asbury does not teach collecting at least portion of valve metal iodine for reuse, it would have been obvious to one of ordinary skill in the art to recycle at least part of the iodine since doing so would reduce the cost of purchasing iodine.

As for claims 11 and 12, when employing iodine taught by Asbury in the method for forming sintered valve metal taught by Oda, the valve metal would inherently be tantalum iodide or niobium iodide depending the use of valve metal.

As for the 16-18, Oda teaches sintering in vacuum at 1100 for 1 hrs, col. 7, lines 18-21. The sintering of valve metal powder would expect to produce surface diffusion and evaporation/condensation and the present of valve metal powder and valve metal iodine compound in equilibrium.

As for claims 20 and 23-24, Oda teach deoxidizing after sintering, wherein magnesium chip is used, col. 7, lines 22-25

As for claims 49 and 50 while Oda in view of Asbury does not each deoxidizing the valve metal in the presence of an oxygen getter within the container, the claims are a product claims and there is no distinction between the claimed products and those of Oda in view of Asbury. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its

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method of production . If the product in the product-by-process claim is the same as or obvious from a product of the prior art the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 227 USPQ964, 966 (Fed. Cir. 1985).

As for claims 26 and 52 Oda teaches anodization after sintering and forming into capacitor, see col. 9, lines 46-51.

As for claim 92-93 and 95-95, since the method of Oda in view of Asbury is substantially the same as the applicant, the sintered porous bonded valve metal powder would inherently have shrinkage as same as applicants.

5. Claims 3-4, 14-15, 19-22, 53, 91, and 94 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

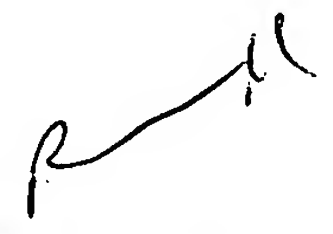
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoclan T. Mai whose telephone number is (571) 272-1246. The examiner can normally be reached on 9:30-6:00 PM Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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